

THE UNITED STATES PATENT AND TRADEMARK OFFICE

4321X

In re Application of:)	
Gary K. Michelson)	
Serial No.: 08/480,908)	Group Art Unit: 3764
Filed: June 7, 1995)	Examiner: M. Brown
For: THREADED FRUSTO-CONICAL)	
INTERBODY SPINAL FUSION)	
IMPLANTS)	

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 RECEIVED

OCT 0 3 2003

TECHNOLOGY CENTER HS700

Sir:

<u>INFORMATION DISCLOSURE STATEMENT</u> <u>UNDER 37 C.F.R. § 1.97(c)</u>

Further to the Information Disclosure Statements filed July 9, 1997; May 8, 1998; January 14, 1999; June 30, 1999; November 3, 1999; and March 20, 2000, and pursuant to 37 C.F.R. §§ 1.56 and 1.97(c), applicant brings to the attention of the Examiner the documents listed on the attached Form PTO-1449. This Information Disclosure Statement is being filed after the events recited in Section 1.97(b) but, to the undersigned's knowledge, before the mailing date of either a Final Action or a Notice of Allowance. Under the provisions of 37 C.F.R. § 1.97(c), this Information Disclosure Statement is accompanied by a fee of \$180.00 as specified by Section 1.17(p).

Copies of the following listed documents are enclosed:

- 1. U.S. 3,719,186
- 2. Cloward, Ralph B.; Surgical Techniques for Lumbar Disc Lesions; Codman; Signature Serial 3.
- Cloward, Ralph B.; Ruptured Cervical Intervertebral Discs: Removal of Disc & Osteophytes & Anterior Cervical Interbody Fusion (A.C.I.F.); Codman; Signature Series 4.
- 4. Cloward, Ralph B.; Recent Advances in Surgery of the Cervical Spine; pp. 285-293; German Society For Neurosurgery: Volume 2 Cervical Spine Operations; Excerpta Medica.

- 5. Hutter, Charles George; Spinal Stenosis and Posterior Lumbar Interbody Fusion; pp. 103-114; Clinical Orthopaedics and Related Research; No. 193; The Association of Bone and Joint Surgeons.
- 6. Lin, Paul M.; Posterior Lumbar Interbody Fusion; pp. 114-122; Charles C. Thomas; Springfield, Illinois.
- 7. Lin, Paul M.; Lumbar Interbody Fusion: Principles and Techniques in Spine Surgery; Techniques and Complications; pp. 81, 98, 120, 146, 173, 180-184, 204, 224, 225, 231; Aspen Publishers, Inc.; 1989.
- 8. Tan, S.B.; A Modified Technique of Anterior Lumbar Fusion with Femoral Cortical Allograft; pp. 83-93; The Journal of Orthopaedic Surgical Techniques, Volume 5, No. 3, 1990.
- 9. Muller, M.E.; Manual of Internal Fixation: Techniques Recommended by the AO Group; Second Edition, Expanded and Revised; pp. 3-20, 27-41, 53-58, 71-78, 94, 311, 320; Springer-Verlag; 1979.
- 10. Hierholzer, G.; Manual on the AO/ASIF Tubular External Fixator; pp. 85-91; Springer-Verlag; 1985.
- 11. Heim, Urs; Small Fragment Set Manual: Technique Recommended by the ASIF-Group; pp. 5-7, 10, 20, 21, 30; Springer-Verlag; 1974.
- 12. Harmon, Paul H.; Anterior Excision and Vertebral Body Fusion Operation for Intervertebral Disk Syndromes of the Lower Lumbar Spine: Three- to Five-Year Results in 244 Cases; pp. 107-127; Clinical Orthopaedics and Related Research, No. 26, J.B. Lippincott Company, 1963.
- 13. Harmon, Paul H.; A Simplified Surgical Technic for Anterior Lumbar Diskectomy and Fusion; Avoidance of Complications; Anatomy of the Retroperitoneal Veins; pp. 130-143; Clinical Orthopaedics and Related Research, No. 37, J.B. Lippincott Company, 1964.
- 14. Bullough, Peter G.; Atlas of Spinal Diseases; Figure 5.7; J.B. Lippencott Company; 1988
- 15. Canale, S. Terry; Campbell's Operative Orthopaedics; Volume 3, 9th Edition; pp. 2191, 2216, 2459; Mosby, 1998.

Copies of English language abstracts, Search Reports, or in some cases where available, more complete translations or U.S./U.K. related patents of the listed non-English documents (previously cited) are attached.

Applicant respectfully requests that the Examiner consider the listed documents and indicate that they were considered by making appropriate notations on the attached form.

Please note that in the Information Disclosure Statements submitted January 14, 1999 and June 30, 1999, ES 283078 is related to U.S. Patent No. 4,877,020; JP 57-29348 is related to U.S. Patent No. 4,349,921; and JP 61-122859 is related to U.S. Patent No. 4,759,766, all of which were also submitted in the Information Disclosure Statements dated June 30, 1999. Additionally, the applicant submits herewith the following U.S./U.K. related patents corresponding with the following non-English references:

GB 1291470	relates to	DE 1961531
GB 1492990	relates to	DE 2446039
GB 1531487	relates to	FR 2295729
US 5,279,292	relates to	DE 4104359

The present application Serial No. 08/480,908 is a continuation-in-part of application Serial No. 08/396,414, now U.S. Patent No. 6,080,155, which is a continuation-in-part of application Serial No. 08/074,781, now U.S. Patent No. 5,484,437, which is a continuation-in-part of application Serial No. 07/968,240, now U.S. Patent No. 5,741,253, which is a continuation of application Serial No. 07/698,674, now abandoned, which is a divisional of application Serial No. 07/205,935, now U.S. Patent No. 5,015,247.

Applicant brings to the Examiner's attention that the '253 patent, the '437 patent, and U.S. Patent No. 6,096,038 (a divisional of the '437 patent) were the subject of litigation in the United States District Court for the Western District of Tennessee, Western Division, Case No. 99-2656GV, hereinafter referred to as Litigation 3 ("Lit. 3"). The claims of the '437 patent are generally directed to a method for inserting an implant. The claims of the '038 patent are generally directed to instruments used for preparing adjacent vertebrae to receive an implant and/or inserting an implant.

In Litigation 3, the Defendants asserted that various references are pertinent to the issue of validity of the '437 patent, the '253 patent, and the '038 patent under 35 U.S.C. §§ 102 and 103. Applicant notes for the Examiner on the attached Form PTO-1449 in the column for the Examiner's initials the references identified by Defendants in Litigation 3 as being allegedly pertinent to the '437 patent by the designation "Lit. 3a." Applicant notes for the Examiner on the attached Form PTO-1449 in the column for the

Examiner's initials the references identified by Defendants in Litigation 3 as being allegedly pertinent to the '253 patent by the designation "Lit. 3b." Applicant notes for the Examiner on the attached Form PTO-1449 in the column for the Examiner's initials the references identified by Defendants in Litigation 3 as being allegedly pertinent to the '038 patent by the designation "Lit. 3c."

The Defendents in Litigation 3 also raised allegations of inequitable conduct in relation to the procurement of:

- (1) the '253 patent for failing to (a) highlight U.S. Patent No. 4,570,624 to Wu, (b) disclose litigation related to the '247 patent, and (c) disclose EP 0077159 to Atkins, an article written by Jose Vich ("Anterior cervical interbody fusion with threaded cylindrical bone," *Neurosurg* 63: 750-753, 1985), and manuals by Muller, M.E. ("Manual of Internal Fixation: Techniques Recommended by the AO Group;" Second Edition, Expanded and Revised; pp. 3-20, 27-41, 53-58, 71-78, 94, 311, 320; Springer-Verlag; 1979), Hierholzer, G. ("Manual on the AO/ASIF Tubular External Fixator;" pp. 85-91; Springer-Verlag; 1985), and Heim, Urs ("Small Fragment Set Manual: Technique Recommended by the ASIF-Group;" pp. 5-7, 10, 20, 21, 30; Springer-Verlag; 1974);
- (2) the '437 patent for failing to (a) disclose the existence of and information surrounding litigation concerning inventorship issues with the subject matter of U.S. Patent No. 5,489,307 to Kuslich and (b) disclose U.S. Patent No. 2,842,131 to Smith, U.S. Patent No. 4,142,517 to Stavropoulos et al., U.S. Patent No. 4,677,883 to Lee, U.S. Patent No. 4,830,000 to Shutt, U.S. Patent No. 4,878,915 to Brantigan, U.S. Patent No. 4,943,291 to Tanguy, U.S. Patent No. 4,961,740 to Ray et al., and U.S. Patent No. 5,055,104 to Ray; and
- (3) the '038 patent for failing to (a) disclose the existence of and information surrounding litigation concerning inventorship issues with the subject matter of U.S. Patent No. 5,489,307 to Kuslich and (b) filing an allegedly misleading Rule 131 declaration.

Litigation 3, mentioned above, and Litigations 1 and 2, discussed in the Information Disclosure Statement dated January 14, 1999, are no longer pending. The jury in Litigation 2 found all asserted claims of the '253 patent valid in view of the art cited by the defendant. Litigations 1-3 were settled with the defendants in each litigation

retracting their assertions of invalidity and inequitable conduct. Discovery documents relating to the aforementioned litigations are available upon request.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If the Examiner applies any of the documents as prior art against any claim in the application and applicant determines that the cited documents do not constitute "prior art" under United States law, applicant reserves the right to present to the office the relevant facts and law regarding the appropriate status of such documents.

Applicant further reserves the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application. If there is any fee due in connection with the filing of this Statement, please charge the fee to our Deposit Account No. 50-1066.

Respectfully submitted,

MARTIN & FERRARO, LLP

Date: September 23, 2003

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					С	MB 0651-0031
Substitute for	FORM PTO-1449	32 33	Attorney Docket Nu 101.0053-00000	ımber	Customer No 22882).
INFO	RMATION DISCLOSURE	ATTON	Applicant		Application I	Number
IN AN APPLICATION		Gary K. Michelson		08/480,908		
(Use several sheets if necessary)		Filing Date		Group Art Ur	nit Examiner	
	Sheet <u>1</u> of <u>3</u>		June 7, 1995		3764	M. Brown
		U.S. PATEN	T DOCUMENTS		_	
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
Lit. 3b	3,719,186	03/1973	Merig, Jr.			
Lit. 3c	4,349,921	09/1982	Kuntz			
Lit. 3b/3c	4,570,624	02/1986	Wu			
Lit. 3c	4,714,469	12/1987	Kenna			
	4,759,766	07/1988	Buettner-Janz et al.			
	4,877,020	10/1989	Vich			-
Lit. 3c	5,026,373	06/1991	Ray et al.			
Lit. 3a/3c	5,055,104	10/1991	Ray			
	5,279,292	01/1994	Baumann et al.			
Lit. 3a/3c	5,489,307	02/1996	Kuslich et al.			
	FC	REIGN PATE	ENT DOCUMENTS			
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION (YES/NO)
Lit. 3a/3b/3c	0 077 159	04/1983	Europe			N/A
_	0 162 005	11/1985	Europe			Yes
\	0 179 695	04/1986	Europe			Abstract and Partial
	0599419 A2	06/1994	Europe			Abstract Only
	2 295 729	07/1976	France			UK Equivalent GB 1531487
`	2 581 336	11/1986	France			Abstract Only
,	2 703 580	10/1994	France		-	Yes
	1961531	07/1970	Germany	-		UK Equivalent GB 1291470
	24 46 039	04/1975	Germany			UK Equivalent GB 1492990
`	3101333 A1	12/24/81	Germany			Abstract Only
	3132520 A1	06/1982	Germany			Abstract Only
	3505567 A1	06/1986	Germany			Abstract Only
	36 08 163 A1	09/1987	Germany			Abstract Only
	41 04 359 A1	08/1992	Germany			US Equivalent 5,279,292
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	43 02 397 A1 OIPE	07/29/93	Germany			Abstract Only
	1291470	10/1972	Great Britain			N/A
	1492990 SEP Z 9 2000 N	11/1977	Great Britain			N/A
	1531487	11/1978	Great Britain			N/A
	57-29348	02/1982	Japan			US Equivalent 4,349,921
	60-31706	02/1985	Japan			Yes
	60-43984	03/1985	Japan			Yes
	61-122859	06/1986	Japan			US Equivalent 4,759,766
	62-155846	07/1987	Japan			Yes
	1107854	08/1984	Soviet Union			Yes
	1124960	11/1984	Soviet Union			Abstract Only
_	1217374	03/1986	Soviet Union			Abstract Only
	1222254	04/1986	Soviet Union			Abstract Only
	283078	05/1985	Spain			US Equivalent 4,877,020
	106 101	07/1939	Sweden			Partial and English Language Search Report
ì	OTHER DOCUMENTS (Including Au	thor, Title, Date, Pertin	ent Pages, E	tc.)	
Lit. 3a/3c	Cloward, Ralph B.; Surgical Technique	s for Lumbar	Disc Lesions; Codman; S	Signature Ser	ial 3.	
Lit. 3c	Cloward, Ralph B.; Ruptured Cervical Intervertebral Discs: Removal of Disc & Osteophytes & Anterior Cervical Interbody Fusion (A.C.I.F.); Codman; Signature Series 4.					
Lit. 3	Cloward, Ralph B.; Recent Advances in Surgery of the Cervical Spine; pp. 285-293; German Society For Neurosurgery: Volume 2 Cervical Spine Operations; Excerpta Medica.					
Lit. 3a/3b λ	Otero-Vich, Jose M.; Anterior Cervical Interbody Fusion with Threaded Cylindrical Bone; pp. 750-753; Journal of Neurosurgery, November 1985, Volume 63, No. 5.					
Lit. 3c	Hutter, Charles George; Spinal Stenosis and Posterior Lumbar Interbody Fusion; pp. 103-114; Clinical Orthopaedics and Related Research; No. 193; The Association of Bone and Joint Surgeons.					
Lit. 3c	Lin, Paul M.; Posterior Lumbar Interbody Fusion; pp. 114-122; Charles C. Thomas; Springfield, Illinois.					
Lit. 3c	Lin, Paul M.; Lumbar Interbody Fusion: Principles and Techniques in Spine Surgery; Techniques and Complications; pp. 81, 98, 120, 146, 173, 180-184, 204, 224, 225, 231; Aspen Publishers, Inc.; 1989.					
Lit. 3c	Tan, S.B.; A Modified Technique of Anterior Lumbar Fusion with Femoral Cortical Allograft; pp. 83-93; The Journal of Orthopaedic Surgical Techniques, Volume 5, No. 3, 1990.					
Lit. 3a/3b	Muller, M.E.; Manual of Internal Fixation: Techniques Recommended by the AO Group; Second Edition, Expanded and Revised; pp. 3-20, 27-41, 53-58, 71-78, 94, 311, 320; Springer-Verlag; 1979.					
Lit. 3a/3b \	Hierholzer, G.; Manual on the AO/ASIF	Tubular Exte	rnal Fixator; pp. 85-91;	Springer-Verla	ag; 1985.	
Lit. 3a/3b	Heim, Urs; Small Fragment Set Manua Verlag; 1974.	I: Technique	Recommended by the A	SIF-Group; p	p. 5-7, 10, 20, 2	1, 30; Springer-
Lit. 3c	Harmon, Paul H.; Anterior Excision and Lumbar Spine: Three- to Five-Year Re 26, J.B. Lippincott Company, 1963.	d Vertebral Bo esults in 244 C	dy Fusion Operation for Cases; pp. 107-127; Clini	Intervertebra cal Orthopaed	Disk Syndrome	es of the Lower d Research, No.

EXAMINER	DATE CONSIDERED			
Lit. 3	Canale, S. Terry; Campbell's Operative Orthopaedics; Volume 3, 9 th Edition; pp. 2191, 2216, 2459; Mosby, 1998.			
Lit. 3a	Butts, M.K.; Biomechanical Analysis of a New Method for Spinal Interbody Fixation; 1987 Symposium, American Society of Mechanical Engineers, "Advance in Bioengineering", Boston, MA (December 13-18, 1987).			
Lit. 3b	Bullough, Peter G.; Atlas of Spinal Diseases; Figure 5.7; J.B. Lippencott Company; 1988			
Lit. 3c	Harmon, Paul H.; A Simplified Surgical Technic for Anterior Lumbar Diskectomy and Fusion; Avoidance of Complications; Anatomy of the Retroperitoneal Veins; pp. 130-143; Clinical Orthopaedics and Related Research, No. 37, J.B. Lippincott Company, 1964.			

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

